This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-50. (CANCELED)

51. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system containing a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel;

(c) performing a quick dump to discharge the process fluid from the vessel, leaving residual process fluid on the surface of the object;

(d) after discharging the process fluid from the vessel, introducing a drying vapor into the system, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface, and exhausting the drying vapor from the system.

52. (ORIGINAL) The method of claim 51 wherein the process fluid is deionized water.

53. (ORIGINAL) The method of claim 51 wherein the process fluid is hydrofluoric acid.

54. (ORIGINAL) The method of claim 51, further including the step of introducing a heated gas into the vessel after step (d) to volatilize condensed drying vapor from the surface.

55. (ORIGINAL) The method of claim 51, wherein the method further includes the step of reclaiming drying vapor from the vessel and condensing the reclaimed drying vapor to a liquid form.

56. (ORIGINAL) The method of claim 51 wherein the drying vapor is formed from isopropyl alcohol.

57. (ORIGINAL) The method of claim 51 wherein the object is a wafer substrate.

58. (ORIGINAL) The method of claim 51, wherein step (b) includes rinsing the wafers in ozonated rinse fluid

59. (ORIGINAL) The method of claim 51 wherein a drying compound is heated to a temperature below its boiling point to produce the drying vapor.

60. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system containing a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel;

(c) performing a quick dump to discharge the process fluid from the vessel, leaving residual process fluid on the surface of the object, ~~The method of claim 51~~ wherein the process fluid is discharged from the vessel in less than 5 seconds;

(d) after discharging the process fluid from the vessel, introducing a drying vapor into the system, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface, and exhausting the drying vapor from the system.

61. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel;

(c) discharging the process fluid from the vessel, leaving residual process fluid on the surface of the object;

(d) prior to step (b), generating a drying vapor at a location remote from the vessel; and

(e) after discharging the process fluid from the vessel, introducing a drying vapor into the vessel using a carrier gas to carry the drying vapor from the remote location into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface.

62. (ORIGINAL) The method of claim 61 wherein:

step (a) further provides a chamber fluidly coupled to the vessel, the chamber positioned remotely from the vessel;

the generating step includes the step of heating a drying compound within the chamber to produce the drying vapor; and

step (e) includes passing the carrier gas through the chamber to cause it to carry the drying vapor into the vessel.

63. (ORIGINAL) The method of claim 61 wherein the object is a wafer substrate.

64. (ORIGINAL) The method of claim 61 wherein the process fluid is deionized water.

65. (ORIGINAL) The method of claim 61 wherein the process fluid is hydrofluoric acid.

66. (ORIGINAL) The method of claim 61, further including the step of introducing a heated gas into the vessel after step (d) to volatilize condensed drying vapor from the surface.

67. (ORIGINAL) The method of claim 61, wherein the method further includes the step of reclaiming drying vapor from the vessel and condensing the reclaimed drying vapor to a liquid form.

68. (ORIGINAL) The method of claim 61 wherein the drying vapor is formed from isopropyl alcohol.

69. (ORIGINAL) The method of claim 61 wherein the process fluid includes hydrochloric acid.

70. (ORIGINAL) The method of claim 61 wherein the drying vapor condenses on substantially the entire surface of the object.

71. (ORIGINAL) The method of claim 61, wherein step (b) includes rinsing the objects in ozonated rinse fluid.

72. (ORIGINAL) The method of claim 62 wherein the drying compound is heated to a temperature below its boiling point.

73. (ORIGINAL) The method of claim 61 wherein the rinse fluid is discharged from the vessel in less than 5 seconds.

74. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system containing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) performing a quick dump to discharge the rinse fluid from the vessel leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and

reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces, and exhausting the drying vapor from the system.

75. (ORIGINAL) The method of claim 74 further including the step of introducing a heated gas into the vessel after step (e) to volatilize condensed drying vapor from the surface.

76. (ORIGINAL) The method of claim 74, wherein the method further includes the step of reclaiming drying vapor from the vessel and condensing the reclaimed drying vapor to a liquid form.

77. (ORIGINAL) The method of claim 74 wherein the drying vapor is formed from isopropyl alcohol.

78. (ORIGINAL) The method of claim 74 wherein the rinse fluid is deionized water.

79. (ORIGINAL) The method of claim 74 wherein the object is a wafer substrate.

80. (ORIGINAL) The method of claim 74 wherein the liquid chemical is hydrofluoric acid.

81. (ORIGINAL) The method of claim 74 wherein the liquid chemical includes hydrochloric acid.

82. (ORIGINAL) The method of claim 74, wherein step (c) includes rinsing the objects in ozonated rinse fluid.

83. (ORIGINAL) The method of claim 74 wherein a drying compound is heated to a temperature below its boiling point produce the drying vapor.

84. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system containing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) performing a quick dump to discharge the rinse fluid from the vessel ~~The method of claim 74 wherein the rinse fluid is discharged from the vessel~~ in less than 5 seconds leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces, and exhausting the drying vapor from the system.

85. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) discharging the rinse fluid from the vessel, leaving residual rinse fluid on the surface of the object;

(e) prior to step (b), generating a drying vapor at a location remote from the vessel; and

(f) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel using a carrier gas to carry the drying vapor from the remote location into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces.

86. (ORIGINAL) The method of claim 85 wherein

step (a) further provides a chamber fluidly coupled to the vessel, the chamber positioned remotely from the vessel;

the generating step includes the step of heating a drying compound within the chamber to produce the drying vapor; and

step (f) includes passing the carrier gas through the chamber to cause it to carry the drying vapor into the vessel.

87. (ORIGINAL) The method of claim 85 wherein the object is a wafer substrate.

88. (ORIGINAL) The method of claim 85 wherein the liquid chemical is hydrofluoric acid.

89. (ORIGINAL) The method of claim 85, wherein the method further includes the step of reclaiming drying vapor from the vessel and condensing the reclaimed drying vapor to a liquid form.

90. (ORIGINAL) The method of claim 85 wherein the drying vapor is formed from isopropyl alcohol.

91. (ORIGINAL) The method of claim 85 wherein the rinse fluid is deionized water.

92. (ORIGINAL) The method of claim 85 wherein the method includes the step of rinsing the objects in ozonated water.

93. (ORIGINAL) The method of claim 90, including the step of rinsing the object with ozonated rinse fluid prior to step (d).

94. (ORIGINAL) The method of claim 85 wherein the liquid chemical includes hydrochloric acid.

95. (ORIGINAL) The method of claim 85, wherein step (c) includes rinsing the objects in ozonated rinse fluid.

96. (ORIGINAL) The method of claim 86 wherein the drying compound is heated to a temperature below its boiling point.

97. (ORIGINAL) The method of claim 85 wherein the rinse fluid is discharged from the vessel in less than 5 seconds.

98. (ORIGINAL) The method of claim 85, further including the step of introducing a heated gas into the vessel to volatilize condensed drying vapor from the surface.

99. (ORIGINAL) The method of claim 85 wherein the drying vapor condenses on substantially the entire surface of the object.

100. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) discharging the rinse fluid from the vessel, leaving residual rinse fluid on the surface of the object;

(e) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces; wherein the method includes the step of rinsing the objects in ozonated rinse fluid.

101. (ORIGINAL) The method of claim 100, wherein the step of rinsing the object with ozonated rinse fluid is performed prior to step (d).

102. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel, a remote chamber fluidly coupled to but remote from the vessel, and at least one object having a surface;

(b) treating the object using a wet processing procedure outside the vessel, to produce a wet object having residual process fluid thereon;

(c) positioning the wet object in the vessel;

(d) generating a drying vapor in the chamber; and

(e) passing a carrier gas through the chamber into the vessel, the carrier gas carrying the drying vapor from the chamber into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface.

103. (ORIGINAL) The method of claim 102 wherein step (d) includes heating a drying compound within the chamber to produce the drying vapor.

104. (ORIGINAL) The method of claim 103 wherein the drying compound is heated to a temperature below its boiling point.

105. (ORIGINAL) The method of claim 102, wherein:

step (a) further provides a lid for the vessel, the lid including at least one inlet;

the method further includes the step of sealing the vessel using the lid; and

in step (e) the carrier gas and drying vapor are passed into the vessel via the at least one inlet in the lid.

106. (ORIGINAL) The method of claim 103 wherein the drying compound is isopropyl alcohol.

107. (ORIGINAL) The method of claim 102, wherein the method further includes the step of reclaiming drying vapor from the vessel and condensing the reclaimed drying vapor to a liquid form.

108. (ORIGINAL) The method of claim 102, further including the step of introducing a heated gas into the vessel after step (e) to volatilize condensed drying vapor from the surface.

109. (ORIGINAL) The method of claim 102 wherein the object is a wafer substrate.

110. (ORIGINAL) The method of claim 102 wherein the residual process fluid includes deionized water.

111. (ORIGINAL) The method of claim 102 wherein the residual process fluid is hydrofluoric acid.

112. (ORIGINAL) A method of treating and drying the surfaces of a semiconductor substrate, comprising the steps of:

(a) providing a vessel and at least one semiconductor substrate having a surface;

(b) exposing the semiconductor substrate to a chemical treatment solution in the vessel;

(c) discharging the treatment solution from the vessel;

(d) after the treatment solution has been fully discharged from the vessel and without first rinsing the semiconductor substrate, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the semiconductor substrate and reducing the surface tension of the residual treatment solution causing the residual treatment solution to flow off of the surfaces.

113. (ORIGINAL) The method of claim 112, further including the step of introducing a heated gas into the vessel after step (d) to volatilize condensed drying vapor from the surface.

114. (ORIGINAL) The method of claim 112 wherein the drying vapor is formed from isopropyl alcohol.

115. (ORIGINAL) The method of claim 112 wherein:

step (a) further provides a lid for the vessel, the lid including at least one inlet;

the method further includes the step of sealing the vessel using the lid; and

in step (d) the carrier gas and drying vapor are passed into the vessel via the at least one inlet in the lid.

116. (ORIGINAL) The method of claim 112 wherein the object is a wafer substrate.

117. (ORIGINAL) The method of claim 112 wherein the drying vapor condenses on substantially the entire surface of the object.

118. (ORIGINAL) The method of claim 112 wherein a drying compound is heated to a temperature below its boiling point to produce the drying vapor.

119. (CURRENTLY AMENDED) A method of treating and drying the surfaces of a semiconductor substrate, comprising the steps of:

(a) providing a vessel and at least one semiconductor substrate having a surface;

(b) exposing the semiconductor substrate to a chemical treatment solution in the vessel;

(c) discharging the treatment solution from the vessel ~~The method of claim 112 wherein the treatment solution is discharged from the vessel~~ in less than 5 seconds;

(d) after the treatment solution has been fully discharged from the vessel and without first rinsing the semiconductor substrate, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the semiconductor substrate and reducing the surface tension of the residual treatment solution causing the residual treatment solution to flow off of the surfaces.

120. (ORIGINAL) A method of treating and drying the surfaces of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a treatment solution in the vessel, the treatment solution including hydrofluoric acid;

(c) discharging the treatment solution from the vessel;

(d) prior to step (b), generating a drying vapor at a location remote from the vessel; and

(e) after the treatment solution has been fully discharged from the vessel and without first rinsing the object, introducing a drying vapor into the vessel using a carrier gas to carry the drying vapor from the remote location into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual treatment solution causing the residual treatment solution to flow off of the surfaces.

121. (ORIGINAL) The method of claim 120 wherein

step (a) further provides a chamber fluidly coupled to the vessel, the chamber positioned remotely from the vessel;

the generating step includes the step of heating a drying compound within the chamber to produce the drying vapor, and wherein step (e) includes passing the carrier gas through the chamber to cause it to carry the drying vapor into the vessel.

122. (ORIGINAL) The method of claim 121, wherein the method further includes the step of reclaiming drying vapor from the vessel and condensing the reclaimed drying vapor to a liquid form.

123. (ORIGINAL) The method of claim 120 wherein the object is a wafer substrate.

124. (ORIGINAL) The method of claim 120 further including the step of introducing a heated gas into the vessel after step (d) to volatilize condensed drying vapor from the surface.

125. (ORIGINAL) The method of claim 120 wherein the drying vapor is formed from isopropyl alcohol.

126. (CURRENTLY AMENDED) A method of treating and drying the surfaces of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a treatment solution in the vessel, the treatment solution including hydrofluoric acid;

(c) discharging the treatment solution from the vessel ~~The method of claim 120 wherein the treatment solution is discharged from the vessel~~ in less than 5 seconds;

(d) prior to step (b), generating a drying vapor at a location remote from the vessel; and

(e) after the treatment solution has been fully discharged from the vessel and without first rinsing the object, introducing a drying vapor into the vessel using a carrier gas to carry the drying vapor from the remote location into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual treatment solution causing the residual treatment solution to flow off of the surfaces.

127. (ORIGINAL) A method of treating and drying an object, comprising the steps of:

(a) providing a system containing a vessel having a moveable lid, the lid formed of a plurality of walls joined together to form a bottomless enclosure, and further providing an object having a surface;

(b) exposing the object to a process fluid in the vessel;

(c) sealing the vessel using the lid;

(d) heating at least a portion of the lid to a temperature above that of the process fluid;

(e) discharging the process fluid from the vessel, leaving residual process fluid on the surface of the object; and

(f) after the process fluid has been fully discharged from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the

residual process fluid to flow off of the surface, and exhausting the drying vapor from the system.

128. (ORIGINAL) The method of claim 127 wherein the lid is provided to have at least one inlet, and wherein step (f) includes introducing the drying vapor into the vessel via the inlet in the lid.

129. (ORIGINAL) The method of claim 127, further including the step of introducing a purging gas into the vessel prior to introducing the drying vapor.

130. (ORIGINAL) The method of claim 127, further including the step of introducing a heated gas into the vessel after step (f) to volatilize condensed drying vapor from the surface of the object.

131. (ORIGINAL) The method of claim 127 wherein the object is a wafer substrate.

132. (ORIGINAL) The method of claim 127 wherein the process fluid includes deionized water.

133. (ORIGINAL) A method of treating and drying an object, comprising the steps of:

(a) providing a vessel having a moveable lid, the lid formed of a plurality of walls joined together to form a bottomless enclosure, and further providing an object having a surface;

(b) prior to step (c) suspending the lid above the vessel, exposing the object to a chemical bath in the vessel, then discharging the chemical from the vessel after exposing the object, and then sealing the vessel using the lid;

(c) exposing the object to a rinse fluid in the vessel;

(d) sealing the vessel using the lid;

(e) heating at least a portion of the lid to a temperature above that of the process fluid;

(f) discharging the process fluid from the vessel, leaving residual process fluid on the surface of the object; and

(g) after the process fluid has been fully discharged from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface.

134. (ORIGINAL) The method of claim 133 wherein the step of suspending the lid above the vessel creates a hood above the vessel for minimizing escape of fumes from the vessel into the surrounding atmosphere.

135. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel;

[[(d)]] (c) discharging the process fluid from the vessel to expose the surface to an atmosphere within the vessel, leaving residual process fluid on the surface of the object;

[[(e)]] (d) after discharging the process fluid from the vessel to expose the surface, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface; and

[[(f)]] (e) introducing a heated gas into the vessel after step [[(e)]] (d) to volatilize condensed drying vapor from the surface.

136. (ORIGINAL) The method of claim 135 wherein the process fluid includes deionized water.

137. (ORIGINAL) The method of claim 135 wherein the process fluid includes hydrofluoric acid.

138. (ORIGINAL) The method of claim 135 wherein the process fluid includes hydrochloric acid.

139. (ORIGINAL) The method of claim 135 wherein the drying vapor is formed from isopropyl alcohol.

140. (ORIGINAL) The method of claim 135 wherein the object is a wafer substrate.

141. (ORIGINAL) The method of claim 135 wherein the drying vapor condenses on substantially the entire surface of the object.

142. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel;

(c) discharging the process fluid from the vessel ~~The method of claim 135 wherein the process fluid is discharged~~ in less than 5 seconds to expose the surface to an atmosphere within the vessel, leaving residual process fluid on the surface of the object;

(d) after discharging the process fluid from the vessel to expose the surface, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface; and

(e) introducing a heated gas into the vessel after step (d) to volatilize condensed drying vapor from the surface.

143. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) discharging the rinse fluid from the vessel to expose the surface to an atmosphere within the vessel, leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel to expose the surface, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces; and

(f) introducing a heated gas into the vessel after step (e) to volatilize condensed drying vapor from the surface.

144. (ORIGINAL) The method of claim 143 wherein the rinse fluid includes deionized water.

145. (ORIGINAL) The method of claim 143 wherein the liquid chemical includes hydrofluoric acid.

146. (ORIGINAL) The method of claim 143 wherein the liquid chemical includes hydrochloric acid.

147. (ORIGINAL) The method of claim 143 wherein the drying vapor is formed from isopropyl alcohol.

148. (ORIGINAL) The method of claim 143 wherein the object is a wafer substrate.

149. (ORIGINAL) The method of claim 143 wherein the drying vapor condenses on substantially the entire surface of the object.

150. (ORIGINAL) The method of claim 143 including the step of introducing a heated gas into the vessel after step (e) to volatilize condensed drying vapor from the surface.

151. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) discharging the rinse fluid from the vessel ~~The method of claim 143 wherein the rinse fluid is discharged~~ in less than 5 seconds.to expose the surface to an atmosphere within the vessel, leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel to expose the surface, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces; and

(f) introducing a heated gas into the vessel after step (e) to volatilize condensed drying vapor from the surface

152. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system comprising a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel, the process fluid having a liquid level;

[[(d)]] (c) discharging the process fluid from the vessel so as to drop the liquid level of the process fluid to an elevation beneath the elevation of the surface, leaving residual process fluid on the surface of the object;

[[(e)]] (d) after discharging the process fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface, and exhausting the drying vapor from the system.

153. (ORIGINAL) The method of claim 152 wherein the process fluid includes deionized water.

154. (ORIGINAL) The method of claim 152 wherein the process fluid includes hydrofluoric acid.

155. (ORIGINAL) The method of claim 152 wherein the process fluid includes hydrochloric acid.

156. (ORIGINAL) The method of claim 152 wherein the drying vapor is formed from isopropyl alcohol.

157. (ORIGINAL) The method of claim 152 wherein the object is a wafer substrate.

158. (ORIGINAL) The method of claim 152 wherein the drying vapor condenses on substantially the entire surface of the object.

159. (ORIGINAL) The method of claim 152 including the step of introducing a heated gas into the vessel to volatilize condensed drying vapor from the surface.

160. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system comprising a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel, the process fluid having a liquid level;

(c) discharging the process fluid from the vessel so as to drop the liquid level of the process fluid to an elevation beneath the elevation of the surface ~~The method of claim 152 wherein the process fluid is discharged~~ in less than 5 seconds, leaving residual process fluid on the surface of the object;

(d) after discharging the process fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface, and exhausting the drying vapor from the system.

161. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system comprising a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object, the rinse fluid having a liquid level within the vessel;

(d) discharging the rinse fluid from the vessel so as to drop the liquid level of the process fluid to an elevation beneath the elevation of the surface, leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces, and exhausting the drying vapor from the system.

162. (ORIGINAL) The method of claim 161 wherein the rinse fluid includes deionized water.

163. (ORIGINAL) The method of claim 161 wherein the liquid chemical includes hydrofluoric acid.

164. (ORIGINAL) The method of claim 161 wherein the liquid chemical includes hydrochloric acid.

165 (ORIGINAL) The method of claim 161 wherein the drying vapor is formed from isopropyl alcohol.

166. (ORIGINAL) The method of claim 161 wherein the object is a wafer substrate.

167. (ORIGINAL) The method of claim 161 wherein the drying vapor condenses on substantially the entire surface of the object.

168. (ORIGINAL) The method of claim 161 including the step of introducing a heated gas into the vessel to volatilize condensed drying vapor from the surface.

169. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a system comprising a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object, the rinse fluid having a liquid level within the vessel;

(d) discharging the rinse fluid from the vessel so as to drop the liquid level of the process fluid to an elevation beneath the elevation of the surface ~~The method of claim 161 wherein the rinse fluid is discharged~~ in less than 5 seconds, leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces, and exhausting the drying vapor from the system.

170. (CURRENTLY AMENDED) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a process fluid in the vessel;

[[(d)]] (c) performing a quick dump to discharge the process fluid from the vessel in less than 5 seconds, leaving residual process fluid on the surface of the object;

(d) after discharging the process fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual process fluid, causing the residual process fluid to flow off of the surface.

171. (ORIGINAL) The method of claim 170 wherein the process fluid includes deionized water.

172. (ORIGINAL) The method of claim 170 wherein the process fluid includes hydrofluoric acid.

173. (ORIGINAL) The method of claim 170 wherein the process fluid includes hydrochloric acid.

174. (ORIGINAL) The method of claim 170 wherein the drying vapor is formed from isopropyl alcohol.

175. (ORIGINAL) The method of claim 170 wherein the object is a wafer substrate.

176. (ORIGINAL) The method of claim 170 wherein the drying vapor condenses on substantially the entire surface of the object.

177. (ORIGINAL) The method of claim 170 including the step of introducing a heated gas into the vessel to volatize condensed drying vapor from the surface.

178. (ORIGINAL) A method of treating and drying the surface of an object, comprising the steps of:

(a) providing a vessel and at least one object having a surface;

(b) exposing the object to a liquid chemical within the vessel to treat the object;

(c) introducing a rinse fluid into the vessel to rinse the chemical from the vessel and from the surface of the object;

(d) performing a quick dump to discharge the rinse fluid from the vessel in less than 5 seconds, leaving residual rinse fluid on the surface of the object; and

(e) after discharging the rinse fluid from the vessel, introducing a drying vapor into the vessel, the drying vapor condensing on the surface of the object and reducing the surface tension of the residual rinse fluid, causing the residual rinse fluid to flow off of the surfaces.

179. (ORIGINAL) The method of claim 178 wherein the rinse fluid includes deionized water.

180. (ORIGINAL) The method of claim 178 wherein the liquid chemical includes hydrofluoric acid.

181. (ORIGINAL) The method of claim 178 wherein the liquid chemical includes hydrochloric acid.

182. (ORIGINAL) The method of claim 178 wherein the drying vapor is formed from isopropyl alcohol.

183. (ORIGINAL) The method of claim 178 wherein the object is a wafer substrate.

184. (ORIGINAL) The method of claim 178 wherein the drying vapor condenses on substantially the entire surface of the object.

185. (ORIGINAL) The method of claim 178 including the step of introducing a heated gas into the vessel to volatilize condensed drying vapor from the surface.